REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

The claims have been revised to more particularly point out and distinctly claim the invention. Claim 58 as amended and new claims 61-62 are supported in the specification at page 12, lines 15-16. Claim 46 as amended and new claims 63-65 are supported in the specification at page 19, lines 5-15. New claim 66 corresponds to former claim 58. New claim 67 is added for additional patent protection.

A substitute Sequence Listing is submitted herewith in paper and computer readable form. The paper and computer readable forms are identical. No new matter is included. The substitute Sequence Listing adds new SEQ ID Nos: 40 and 41, to recite the sequences set forth in the specification at page 32, lines 25 and 26.

The specification has been revised at page 32 to reflect the new SEQ ID Nos.

The specification has also been revised at pages 18 and 19 as suggested by the Examiner to reflect SEQ ID Nos.

The objections to the Sequence Listing and specification is thus deemed to be overcome.

Revised Figures 1, 3, 5, 7-11 and 14 are submitted herewith. The figures have been revised to identify the SEQ ID Nos. corresponding to each sequence shown in the figures. A formal request for entry of the figures is stated above. No new matter is added by these amendments.

Regarding the Examiner's comments about Fig. 3, the figure shows an alignment of 4 sequences. The sequence identified as SEQ ID NO: 2 is that of mouse (M) *CHD-1* gene and is a continuous 153 nucleotide sequence. See page 40 of the specification. The sequence identified as SEQ ID NO: 3 is that of chicken (C) *CHD-1A* gene and is a continuous 153 nucleotide sequence. The sequence identified as SEQ ID NO: 4 is that of chicken (C) *CHD-W* gene and is a continuous 153 nucleotide sequence. The sequence identified as SEQ ID NO: 5 is that of great tit (GT) *CHD-W* gene and is a continuous 153 nucleotide sequence.

The objection to the figures is thus deemed to be overcome.

The specification has been revised at page 29 as suggested by the Examiner. The objection to the specification is thus deemed to be overcome.

Claims 48 and 49 have been revised as suggested by the Examiner. The objection to the claims is thus deemed to be overcome.

Claim 55 is cancelled, and claim 34 is revised along the lines of claim 55. The double patenting rejection is thus deemed to be overcome.

Claims 36, 40, 42, 44, 46, 48, 49 and 56-59 are rejected under 35 USC 112, first paragraph, as lacking a sufficient written description. This ground of rejection is respectfully traversed.

Regarding the rejection of claims 36, 40, 44 and 46, this ground of rejection is believed to be overcome by the amendments to claims 36 and 44.

Regarding the rejection of claim 56, reconsideration is respectfully solicited. Knowing the amino acid sequence of any peptide or protein, one skilled in the art can readily determine the complete genus of nucleotide sequences which would encode the peptide or protein. Accordingly the disclosure of a peptide or protein sequence naturally conveys possession of any corresponding nucleotide sequence encoding it. Information which is well known in the art need not be described in the specification. See MPEP Chapter 2100, particularly page 2100-164 (8th Edition, rev. 2003).

Regarding the rejection of claims 57-59, reconsideration is respectfully solicited. Possession of an invention may be shown by describing actual reduction to practice. See MPEP Chapter 2100, particularly page 2100-165. The Examiner recognizes the specification teaches actual reduction to practice of the invention. The Examiner apparently believes that there is insufficient written description for the genus of primer oligonucleotides encompassed by the claim. The specification teaches 3 specific primers. The preparation of primers is disclosed in the specification, for example on page 14 and 18. One skilled in the art would recognize that different length primers could be prepared. The written description requirement does not require an exhaustive list of everything that would be obviously encompassed by a claim to one skilled in the art.

The present specification clearly conveys to one skilled in the art that the inventors had possession of the claimed invention. Reconsideration is requested.

[redacted]

Claims 36, 40, 44, 46, 48, 49 and 56-58 are rejected under 35 USC 112, first paragraph, as lacking enablement. This ground of rejection is respectfully traversed.

Initially, it is noted that claims 48, 49 and 57 have been amended along the lines suggested by the Examiner. Reconsideration is respectfully requested with regard to the remainder of the enablement rejection.

The Manual of Patent Examining Procedure (8th Edition) of the USPTO states the following:

"The Federal Circuit has repeatedly held that "the specification must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation'." *In re Wright*, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993). **Nevertheless, not everything necessary to practice the invention need be disclosed. In fact, what is well-known is best omitted**. (Emphasis added by Applicant) *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991). All that is necessary is that one skilled in the art be able to practice the claimed invention, given the level of knowledge and skill in the art. Further the scope of enablement must only bear a "reasonable correlation" to the scope of the claims. E.g., *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970).

In this regard, MPEP Section 2164.08 provides, in pertinent part, as follows.

As concerns the breadth of a claim relevant to enablement, the only relevant concern should be whether the scope of enablement provided to one skilled in the art by the disclosure is commensurate with the scope of protection sought by the claims. *In re Moore*, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971).

The determination of the propriety of a rejection based upon the scope of a claim relative to the scope of the enablement involves two stages of inquiry. The first is to determine how broad the claim is with respect to the disclosure. The entire claim must be considered. The second inquiry is to determine if one skilled in the art is [sic, would have been] enabled to make and use the entire scope of the claimed invention without undue experimentation.

If a rejection is made based on the view that the enablement is not commensurate in scope with the claim, **the Examiner should identify the subject matter that is considered to be enabled**.

[redacted]

(TRAINING MATERIALS FOR EXAMINING PATENT APPLICATIONS WITH RESPECT TO 35 U.S.C. SECTION 112, FIRST PARAGRAPH-ENABLEMENT CHEMICAL/BIOCHEMICAL APPLICATIONS - III A I.)

In this respect the Applicant submits that the claims have been amended to remove the objectionable phrase "...which gives a specific signal only on the W chromosome...", and the relevant claims now clearly recite that the "W-specific signal" means that hybridization to CHD-W can be distinguished from hybridization to CHD-1A (by size of hybridising restriction fragment) rather than by the absence of hybridization to CHD-1A.

Hence, the Applicant submits that the present invention as defined in the amended claims, when read in conjunction with the specification is enabling to the person skilled in the art of Molecular Biology.

Moreover, the Manual of Patent Examining Procedure (8th Edition) of the USPTO also states the following:

"One does not look to the claims but to the specification to find out how to practice the claimed invention. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1558, 220 USPQ 303, 316-17 (Fed. Cir. 1983); *In re Johnson*, 558 F.2d 1008, 1017, 194 USPQ 187, 195 (CCPA 1977). In *In re Goffe*, 542 F.2d 564, 567, 191 USPQ 429, 431 (CCPA 1976), the court stated:

"to provide effective incentives, claims must adequately protect inventors. **To demand that the first to disclose shall limit his claims to what he has found will work or to materials which meet the guidelines specified for "preferred" materials in a process such as the one herein involved would not serve the constitutional purpose of promoting progress in the useful arts**.

When analyzing the enabled scope of a claim, the teachings of the specification must not be ignored because claims are to be given their broadest reasonable interpretation that is consistent with the specification. "That claims are interpreted in light of the specification does not mean that everything in the specification must be read into the claims. "*Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 220 USPQ 592, 597 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 835 (1984).

(TRAINING MATERIALS FOR EXAMINING PATENT APPLICATIONS WITH RESPECT TO 35 U.S.C. SECTION 112, FIRST PARAGRAPH-ENABLEMENT CHEMICAL/BIOCHEMICAL APPLICATIONS - III A I.)

It is therefore submitted that the MPEP of the USPTO does not require that every feature of the method of the invention be described provided that the inventive aspects thereof are described.

[redacted]

The Applicant therefore submits that the present invention as defined by the claims submitted herewith is patentable as the objections raised by the Examiner have been overcome, since the application as filed is enabling for the scope of the invention sought.

Claim 56 is amended to delete SEQ ID NO. 6.

The rejection of claim 56 under 35 USC 102 as anticipated by Delmas is thus deemed to be overcome.

Claim 60 is cancelled.

The rejection of claim 60 under 35 USC 103 as unpatentable over Funihashi is thus deemed to be overcome.

Accordingly, favorable reconsideration and allowance is solicited.

Respectfully submitted,

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